

NEBRASKA ADMINISTRATIVE CODE

Title 103

Chapter 1

Construction of State-Funded Buildings

001 Definitions. For purposes of this Chapter:

001.01 Agency is a division of state government to which funds are appropriated for the construction of a subject building, or an authorized representative of that agency.

001.02 Alternate Compliance is documentation of compliance by submission of a Designer Certification, Building Owner Certification or Home Energy Rating System Report rather than submission of plans for review by the Energy Office.

001.03 Building Division is the administrator of the State Building Division of the Department of Administrative Services, or an authorized representative.

001.04 Comply, Compliance is to meet or exceed the minimum requirements of the IECC.

001.05 Construction is the initial fabrication of a building, or the modification of or an addition to an existing building.

001.06 Construction Review is the process of determining whether the construction of a subject building is or is not in compliance through an on-site inspection of the building.

001.07 Day is a day when State government offices are open.

001.08 Energy Office is the State Energy Office, or an authorized representative.

001.09 IECC is the latest edition of the International Energy Conservation Code adopted by the Nebraska Legislature, a copy of which is available from the Nebraska Energy Office.

01.10 Plan Review is the process of determining whether the design of a subject building is or is not in compliance.

001.11 State Building is a building which is owned by the State of Nebraska, or which was constructed for state use using state funds.

001.12 State Funds are funds appropriated by the Legislature, including, but not limited to, general funds, cash funds, trust funds, federal and private grants and proceeds from the sale of bonds of the state.

001.13 Subject, Subject Building is a building or a portion of a building to which this rule applies, as determined under the Application section.

002 Application

002.01 General. The following buildings, or portions of buildings, are subject to this rule and must comply with the IECC:

002.01a New state buildings;

002.01b Additions to existing state buildings;

002.01c New lighting, heating, cooling, ventilating or water heating equipment or controls serving more than 20% of the conditioned floor area of an existing state building;

002.01d Replacement of more than 20% of a particular component of the building envelope (for example: 20% of the window area) in an existing state building;

002.01e Modification of a state building for which original construction funds were appropriated after January 1, 2000, which was originally exempt from this law, but which is no longer exempt due to a change in the intended occupancy; and

002.01f New non-state buildings for which any state funds are used in design or construction.

002.02 Exemptions, General. The following buildings, or portions of buildings, are not subject to this rule.

002.02a Buildings for which construction funds were appropriated prior to January 1, 2000;

002.02b Buildings which are neither heated nor cooled, or which have a peak design rate of energy usage for all purposes of less than 1 W/ft² (or 3.4 Btu/hr/ft²);

002.02c Portions of existing state buildings which would not otherwise be affected by an addition or the installation of new lighting, heating, cooling, ventilating or water heating equipment or controls, or replacement of building envelope components;

002.02d Historic buildings; and

002.02e Portions of factory or industrial buildings not designed primarily for human occupancy.

002.03 Exemptions, Building Envelope. Buildings that are not designed to be heated above 50°F or cooled below 85°F are not subject to the IECC building envelope requirements.

003 Standard Design Conditions. The following values may be entered in IECC Table 302.1 and used to determine compliance of subject buildings to be constructed anywhere in Nebraska:

Winter, Design Dry-bulb Temperature = -4°F
Summer, Design Dry-bulb Temperature = 95°F
Summer, Design Wet-bulb Temperature = 78°F
Degree days, heating (65° base) = 6500
Degree days, cooling (65° base) = 1000
Climate zone = 14b

Use of these standard conditions for compliance determination does not relieve the designer of responsibility to size equipment correctly. The agency or designer may chose to use actual, historical weather data for the intended building site rather than these standard values.

004 Compliance Procedures

004.01 Technical Assistance. The Energy Office will provide agencies with copies of the IECC and related educational materials at agency request. Energy Office personnel will be available to answer questions relating to the IECC and these rules, and to meet with agency personnel to provide informal comments on plans that will be submitted for review.

004.02 Determination of Compliance, Plan Review. The Energy Office will prepare a list of documents that must be provided for proper plan review. When an agency has designed a subject building, it will request a plan review and submit those documents to the Energy Office. The Energy Office will review the plans within twenty days following receipt of all required documents and resolution of all waiver requests. Modification of the plans may delay completion of review up to twenty days following the date of the latest modification. The Energy Office will notify the agency of the plan's compliance or non-compliance, and may also identify design elements that prevent compliance or suggest revisions to permit compliance. In some cases, the Energy Office may provide an inspection checklist for use in construction verification.

004.03 Alternate Compliance, Designer Certification. To expedite review when a subject building has been designed by a licensed architect and/or professional engineer(s), the agency may submit a Designer Certification, signed and sealed by all designers, instead of the building plans and specifications. The certification form, which will be provided by the Energy Office, will attest that the building design complies and provide summary information about the design.

004.04 Alternate Compliance, Building Owner Certification. To expedite review for subject detached one- and two-family residential buildings with no architect or engineer of record, the agency may submit a Building Owner Certification completed by the building owner, instead of the building plans and specifications. The certification form, which will be provided by the Energy Office, will attest that the building design complies and provide summary information about the design.

004.05 Alternate Compliance, Home Energy Rating. To expedite review for subject detached one- and two-family residential buildings, the agency may submit a Home Energy Rating System (HERS) Report completed by a Nebraska

certified home energy rater, instead of the building plans and specifications. The report must indicate that the subject building complies with the IECC.

004.06 Review of Alternate Compliance. The Energy Office may select subject buildings, for which alternate compliance was documented, for review. In such cases, the Energy Office will request documentation from the agency as described above. At the completion of its review, the Energy Office will provide written comments to the agency.

004.07 Construction Verification. When the Energy Office has determined that a subject building complies, or has received documentation of alternate compliance, it will provide the agency a Verification of Construction form on which the agency will certify that the building is constructed substantially according to the plans. The Verification of Construction form will be signed by the agency and returned to the Energy Office within twenty days following substantial completion of construction. The Energy Office will maintain a file of these verifications.

004.08 Identical Buildings. When multiple subject buildings are to be constructed from the same set of plans, the plans only need to be submitted for review once, or alternate compliance documents only need to be submitted once. The Energy Office's plan review or the alternate compliance documents will apply to all buildings constructed from the same set of plans. The agency will request additional Verification of Construction forms from the Energy Office on which to certify construction of identical buildings.

005 Waivers.

005.01 Basis for. The Building Division may waive a specific requirement of the IECC for a subject building when meeting that requirement is not in the best interest of the State of Nebraska. This situation might occur when:

005.01a. existing construction makes meeting the requirement physically impossible without causing irreparable damage to the existing building; or

005.01b. application of the requirement would create an irreconcilable conflict with another applicable code; or

005.01c. meeting the requirement is not economically-justified as shown by a life-cycle cost analysis.

005.01c1. The analysis will be prepared by the agency.

005.01c2. The analysis will demonstrate that the present value of the estimated energy cost savings over the life of the building, or specific component, is less than the incremental cost of IECC compliance. The calculation of present value will be based on expected incremental utility costs, the agency's actual discount rate and the most recent edition of *Energy Price Indices and Discount Factors for Life-Cycle Cost Analysis* (NISTIR 85-3273, available from the Energy Office).

005.01c3. When a component in question can reasonably be analyzed without considering interaction with the remainder of the building, a limited analysis is acceptable and encouraged.

005.03 Procedure. The agency will present the request for waiver, with detailed supporting documentation, to the Building Division, and will present a simultaneous copy to the Energy Office. The Energy Office will make a recommendation to the Building Division within ten days, and the Building Division will then have ten additional days to determine whether to grant the waiver. The Building Division will respond directly to the agency, with a copy of that decision to Energy Office.

006 Updates and Amendments. The Building Division may recommend adoption of a more recent edition of the IECC or additional energy efficiency or renewable energy requirements appropriate to subject buildings. Updates or additional requirements will be prepared as amendments to these rules, and will become effective when adopted by the Energy Office after a public hearing.

007 Construction Review. The Energy Office may select subject buildings for an on-site construction review. In such cases, the Energy Office will request documentation from the agency. At the completion of its review, the Energy Office will provide written comments to the agency.